Complete Summary

GUIDELINE TITLE

The role of endoscopic ultrasound for evaluation of mediastinal adenopathy.

BIBLIOGRAPHIC SOURCE(S)

Jacobson BC, Hirota WK, Goldstein JL, Leighton JA, Mallery JS, Waring JP, Baron TH, Faigel DO. The role of EUS for evaluation of mediastinal adenopathy. Gastrointest Endosc 2003 Dec;58(6):819-21. [24 references] PubMed

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Mediastinal adenopathy

GUIDELINE CATEGORY

Diagnosis
Evaluation

CLINICAL SPECIALTY

Gastroenterology
Oncology

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To suggest appropriate situations for which endoscopic ultrasound (EUS) should be utilized in the evaluation of mediastinal adenopathy

TARGET POPULATION

Patients with or suspected of having mediastinal adenopathy

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis/Evaluation

1. Endoscopic ultrasound (EUS)
2. Fine needle aspiration (FNA)

MAJOR OUTCOMES CONSIDERED

Sensitivity and specificity of diagnostic tests

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

In preparing this guideline, a MEDLINE literature search was performed, and additional references were obtained from the bibliographies of the identified articles and from recommendations of expert consultants. When little or no data exist from well-designed prospective trials, emphasis is given to results from large series and reports from recognized experts.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Guidelines for appropriate utilization of endoscopy are based on a critical review of the available data and expert consensus.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

The guideline developers reviewed published cost-minimization studies. One cost-minimization model compared endoscopic ultrasound-fine needle aspiration (EUS-FNA) with positron emission tomography (PET) scanning, computed tomography (CT)-guided FNA, transbronchial FNA, and mediastinoscopy in patients with non-small cell lung cancer (NSCLC) and enlarged subcarinal nodes visualized by CT. The model determined that EUS-FNA was the least costly method for diagnosing malignant adenopathy (specifically N2 disease) as long as the pretest likelihood of malignant adenopathy was at least 24% and EUS-FNA was at least 76% sensitive. Another model specifically compared mediastinoscopy with EUS-FNA for patients with malignant nodes in the subaortic (aortopulmonary window), para-aortic and subcarinal stations. EUS-FNA proved more cost-effective even if the negative predictive value of EUS-FNA was as low as 22%.

METHOD OF GUIDELINE VALIDATION

Not stated

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not applicable

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Each recommendation is followed by evidence grades (A-C) identifying the type of supporting evidence. Definitions of the evidence grades are presented at the end of the "Major Recommendations" field.

Recommendations

Endoscopic ultrasound-fine needle aspiration (EUS-FNA) is indicated for the evaluation of adenopathy and masses of the posterior mediastinum. It is the procedure-of-choice for tissue sampling of such lesions in the subcarinal, subaortic (aortopulmonary window), and periesophageal stations found on cross sectional imaging (computed tomography [CT], magnetic resonance imaging [MRI], or positron emission tomography [PET]). EUS-FNA should also be considered in the preoperative staging of patients with non-small cell lung cancer without definite adenopathy on cross sectional imaging.

Summary

- EUS-FNA is a safe and accurate method for obtaining a tissue diagnosis in patients with mediastinal adenopathy (B).
- In patients with non-small cell lung cancer, EUS-FNA is an accurate and cost-saving method for nodal staging in patients with documented posterior mediastinal adenopathy (B).
- EUS-FNA is the procedure-of-choice for the evaluation of posterior mediastinal nodes and masses seen on cross sectional imaging, and may have a role in the preoperative staging of patients with non-small cell lung cancer without mediastinal abnormalities on cross sectional imaging (C).

Definitions

A - Prospective controlled trials
B - Observational studies
C - Expert opinion

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and classified for the recommendations using the following scheme:

A = Prospective controlled trials
B = Observational studies
C = Expert opinion

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Appropriate evaluation of mediastinal adenopathy
- Fine needle aspiration (FNA) of nodes improves the accuracy of endoscopic ultrasound (EUS) for determining malignant involvement, and may change management (in particular, avoiding mediastinoscopy or thoracotomy) in a significant number of patients.

POTENTIAL HARMS

- False negative results of mediastinal endoscopic ultrasound-fine needle aspiration (EUS-FNA) have been reported in lung cancer, renal cell cancer, Hodgkin's disease and non-Hodgkin's lymphoma.
- Serious complications from EUS-FNA of mediastinal masses and lymph nodes have not been reported, although there has been one case of candidal infection of a mediastinal cyst.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- Further controlled clinical studies are needed to clarify aspects of this statement, and revision may be necessary as new data appear. Clinical consideration may justify a course of action at variance to these recommendations.
- The information in this guideline is intended only to provide general information and not as a definitive basis for diagnosis or treatment in any particular case. It is very important that individuals consult their doctors about specific conditions.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2003 Dec

GUIDELINE DEVELOPER(S)

American Society for Gastrointestinal Endoscopy - Medical Specialty Society

SOURCE(S) OF FUNDING

American Society for Gastrointestinal Endoscopy

GUIDELINE COMMITTEE

Standards of Practice Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Committee Members: Douglas O. Faigel, MD (Chair); Todd H. Baron, MD (Vice Chair); Brian C. Jacobson MD, MPH; William K. Hirota, MD; Jay L. Goldstein, MD; Jonathan A. Leighton, MD; J. Shawn Mallery, MD; J. Patrick Waring, MD

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the American Society for Gastrointestinal Endoscopy (ASGE) Web site.

Print copies: Available from the American Society for Gastrointestinal Endoscopy, 1520 Kensington Road, Suite 202, Oak Brook, IL 60523

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on October 15, 2004. The information was verified by the guideline developer on November 5, 2004.

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